## The Weekly Plant Extra 22 August 2016

**Common names:** mariola, New Mexico rubber plant

Scientific name: Parthenium incanum<sup>1</sup>

**In our Community:** This plant is an "extra" because it cannot be easily viewed from the road. Here's how to find it: across the street from lot 77, between lots 132 and 133, the red trail climbs a small hill, then continues into the wash to intersect the blue trail. You will find the plant at the top of that first small hill, to the right, before the trail makes a sharp right turn. There are also a number of plants further along the trail and to the left.

## **Discussion**

While on a hike during the Saguaro National Park BioBlitz several years ago, I saw a plant I thought I recognized. The flowers looked almost like wild quinine, a plant of the eastern prairie states, but the leaves were wrong, really wrong. But those unusual flowers were a great clue. My BioBlitz discovery was a close relative of wild quinine known as mariola.



Mariola is in the aster family. As with all asters, it has flower heads made of numerous small flowers held tightly together. The flower heads of mariola (and those of wild quinine as well), are small and creamy white, looking a bit like a tiny, compacted cotton ball (though some authors refer to them as small cauliflower heads). Only five of those numerous flowers have petals. It would be very easy to miss the fact that you are seeing a head made of numerous flowers and instead think you are seeing a single flower with five petals. If you climb the hill and find the mariola, tear apart one of the flower heads and convince yourself there really are a number of small flowers there.

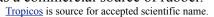
Mariola is a small, evergreen shrub that grows to 2(3) feet high and 3 feet wide. Its small, lobed leaves are covered with white hairs creating pale green leaves, creating a nice contrast if planted near darker shrubs. It is a tough, drought-tolerant plant that likes caliche and limestone soils and can tolerate temperatures into the low teens. Because of this, it is often recommended for plantings on slopes for erosion control.

Mariola's relatives are also useful plants. Wild quinine (Parthenium integrifolium) was used medicinally by Native Americans and early European settlers and,

during World War I, was used as an alternative source for medicinal quinine.

Closer to home, guayule<sup>2</sup> (Parthenium argentatum), a native of southern Texas and Mexico, was used as a source for rubber in the 1920s and during WW II. In 2014, Bridgestone built a research center in Mesa to work with guayule. In 2015, they announced the production of tires made entirely of guayule rubber from plants grown near Eloy. In 2008 Yulex in

Chandler received FDA approval for a hypoallergic latex glove made entirely from guayule latex<sup>3</sup>. Unfortunately, our native mariola contains only a small amount of rubber, not enough to make it viable as a commercial source of rubber.



https://www.youtube.com/watch?v=jwEgHpInBR4 3 https://www.youtube.com/watch?v=8U2j0iMhs-U

Left: flowers and leaves of mariola. Note 5 small, notched, white petals. Right: flowers and leaves of wild quinine.



Photos and text by Mary Welch-Keesey